

2 Find all unknown voltages and currents

KCL @ node ③

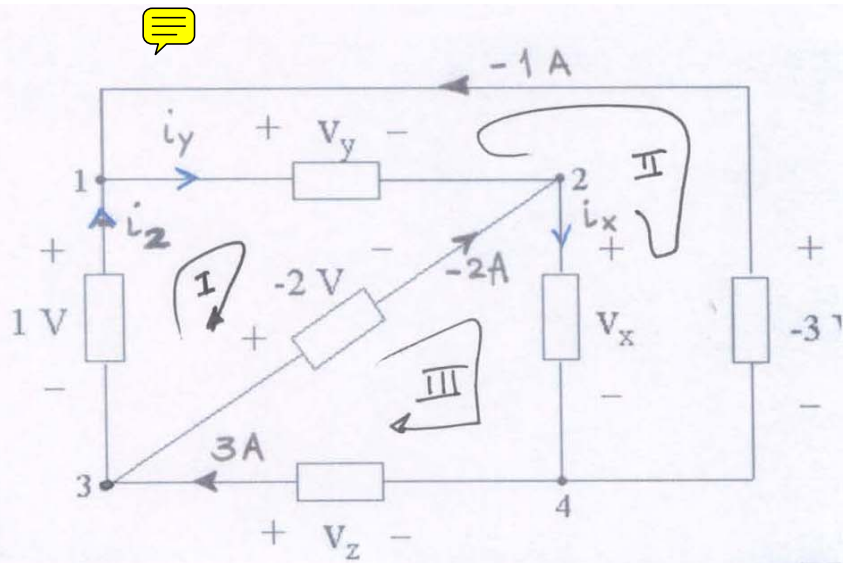
$$3 = -2 + i_2 \Rightarrow i_2 = 5A$$

KCL @ node ①

$$i_2 + (-1) = i_y \Rightarrow i_y = 4A$$

KCL @ node ②

$$i_y + (-2) = i_x \Rightarrow i_x = 2A$$



KVL \curvearrowright loop I : $-1 + V_y - (-2) = 0 \Rightarrow V_y = -1 \text{ Volt}$

KVL \curvearrowright loop II : $-V_y + (-3) - V_x = 0 \Rightarrow V_x = -2 \text{ Volt}$

KVL \curvearrowright loop III : $+(-2) + V_x - V_z = 0 \Rightarrow V_z = -4 \text{ Volt}$